

~~09/982,667~~

=> d 112 bib abs 1-26

L12 ANSWER 1 OF 26 USPATFULL on STN
AN 2004:273678 USPATFULL
TI Reactions on a solid surface
IN Neri, Bruce P., Madison, WI, UNITED STATES
Hall, Jeff G., Madison, WI, UNITED STATES
Lyamichev, Victor, Madison, WI, UNITED STATES
Smith, Lloyd M., Madison, WI, UNITED STATES
PI US 2004214174 A1 20041028
AI US 2002-309584 A1 20021204 (10)
RLI Continuation-in-part of Ser. No. US 2000-732622, filed on 8 Dec 2000,
PENDING Continuation-in-part of Ser. No. US 1999-350309, filed on 9 Jul
1999, GRANTED, Pat. No. US 6348314 Division of Ser. No. US 1996-756386,
filed on 26 Nov 1996, GRANTED, Pat. No. US 5985557 Continuation-in-part
of Ser. No. US 2000-381212, filed on 8 Feb 2000, PENDING A 371 of
International Ser. No. WO 1998-US5809, filed on 24 Mar 1998, PENDING
PRAI WO 1997-US1072 19970122
DT Utility
FS APPLICATION
LREP Mary Ann D. Brow, MEDLEN & CARROLL, LLP, Suite 350, 101 Howard Street,
San Francisco, CA, 94105
CLMN Number of Claims: 79
ECL Exemplary Claim: 1
DRWN 205 Drawing Page(s)
LN.CNT 22093

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to compositions and methods for the
detection and characterization of nucleic acid sequences and variations
in nucleic acid sequences. The present invention relates to methods for
forming a nucleic acid cleavage structure on a solid support and
cleaving the nucleic acid cleavage structure in a site-specific manner.
For example, in some embodiments, a 5' nuclease activity from any of a
variety of enzymes is used to cleave the target-dependent cleavage
structure, thereby indicating the presence of specific nucleic acid
sequences or specific variations thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 2 OF 26 USPATFULL on STN
AN 2004:167995 USPATFULL
TI Enzymes for the detection of specific nucleic acid sequences
IN Ma, Wu-Po, Madison, WI, United States
Lyamichev, Victor I., Madison, WI, United States
Kaiser, Michael W., Madison, WI, United States
Lyamicheva, Natalie E., Madison, WI, United States
Allawi, Hatim Taysir, Madison, WI, United States
Schaefer, James J., Madison, WI, United States
Neri, Bruce P., Madison, WI, United States
PA Third Wave Technologies, Inc., Madison, WI, United States (U.S.
corporation)
PI US 6759226 B1 20040706
AI US 2000-577304 20000524 (9)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Patterson, Jr., Charles L.
LREP Medlen & Carroll, LLP
CLMN Number of Claims: 21
ECL Exemplary Claim: 1
DRWN 0 Drawing Figure(s); 37 Drawing Page(s)
LN.CNT 3758

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel enzymes designed for direct detection, characterization and quantitation of nucleic acids, particularly RNA. The present invention provides enzymes that recognize specific nucleic acid **cleavage** structures formed on a target RNA sequence and that cleave the nucleic acid **cleavage** structure in a site-specific manner to produce non-target **cleavage** products. The present invention provides enzymes having an improved ability to specifically cleave a DNA member of a complex comprising DNA and RNA nucleic acid strands.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 3 OF 26 USPATFULL on STN

AN 2004:94730 USPATFULL

TI Methods and compositions for detecting target sequences

IN Lyamichev, Victor, Madison, WI, UNITED STATES

Neri, Bruce P., Madison, WI, UNITED STATES

Hall, Jeff, Madison, WI, UNITED STATES

Lukowiak, Andrew, Stoughton, WI, UNITED STATES

PI US 2004072182 A1 20040415

AI US 2003-356861 A1 20030203 (10)

RLI Continuation-in-part of Ser. No. US 2002-290386, filed on 7 Nov 2002, PENDING Continuation-in-part of Ser. No. US 2000-713601, filed on 15 Nov 2000, PENDING Continuation-in-part of Ser. No. US 1999-350309, filed on 9 Jul 1999, GRANTED, Pat. No. US 6348314 Division of Ser. No. US 1996-756386, filed on 26 Nov 1996, GRANTED, Pat. No. US 5985557

PRAI WO 1998-US5809 19980324

WO 1997-US1072 19970122

US 2001-344946P 20011107 (60)

US 2002-361060P 20020227 (60)

DT Utility

FS APPLICATION

LREP David A. Casimir, MEDLEN & CARROLL, LLP, Suite 350, 101 Howard Street, San Francisco, CA, 94105

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN 172 Drawing Page(s)

LN.CNT 16736

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to compositions and methods for the detection and characterization of nucleic acid sequences and variations in nucleic acid sequences. The present invention relates to methods for forming a nucleic acid cleavage structure on a target sequence and cleaving the nucleic acid cleavage structure in a site-specific manner. For example, in some embodiments, a 5' nuclease activity from any of a variety of enzymes is used to cleave the target-dependent cleavage structure, thereby indicating the presence of specific nucleic acid sequences or specific variations thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 4 OF 26 USPATFULL on STN

AN 2004:65888 USPATFULL

TI Detection of nucleic acid sequences by invader-directed cleavage

IN Brow, Mary Ann D., Madison, WI, United States

Hall, Jeff Steven Grotelueschen, Madison, WI, United States

Lyamichev, Victor, Madison, WI, United States

Olive, David Michael, Madison, WI, United States

Prudent, James Robert, Madison, WI, United States

PA Third Wave Technologies, Inc., Madison, WI, United States (U.S. corporation)

PI US 6706471 B1 20040316
 AI US 1999-333145 19990614 (9)
 RLI Continuation of Ser. No. US 1996-682853, filed on 12 Jul 1996, now patented, Pat. No. US 6001567 Continuation-in-part of Ser. No. US 1996-599491, filed on 24 Jan 1996, now patented, Pat. No. US 5846717
 DT Utility
 FS GRANTED
 EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Souaya, Jehanne
 LREP Medlen & Carroll, LLP
 CLMN Number of Claims: 26
 ECL Exemplary Claim: 12
 DRWN 111 Drawing Figure(s); 82 Drawing Page(s)
 LN.CNT 7676
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB The present invention relates to methods for the detection and characterization of nucleic acid sequences, as well as variations in nucleic acid sequences. The present invention also relates to methods for forming a nucleic acid cleavage structure on a target sequence and cleaving the nucleic acid cleavage structure in a site-specific manner. The 5' nuclease activity of a variety of enzymes is used to cleave the target-dependent cleavage structure, thereby indicating the presence of specific nucleic acid sequences or specific variations thereof. The present invention further relates to methods and devices for the separation of nucleic acid molecules based by charge.
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 L12 ANSWER 5 OF 26 USPATFULL on STN
 AN 2004:24650 USPATFULL
 TI Detection of RNA
 IN Ma, WuPo, Madison, WI, UNITED STATES
 Lyamichev, Victor, Madison, WI, UNITED STATES
 Kaiser, Michael, Madison, WI, UNITED STATES
 Lyamichieva, Natalie E., Madison, WI, UNITED STATES
 Allawi, Hatin Taysir, Madison, WI, UNITED STATES
 Lukowiak, Andrew A., Madison, WI, UNITED STATES
 Schaefer, James J., Madison, WI, UNITED STATES
 Lukowiak, Andrew A., Madison, WI, UNITED STATES
 PI US 2004018489 A1 20040129
 AI US 2001-864426 A1 20010524 (9)
 RLI Continuation-in-part of Ser. No. US 2000-577304, filed on 24 May 2000, PENDING Continuation-in-part of Ser. No. US 1999-350309, filed on 9 Jul 1999, GRANTED, Pat. No. US 6348314 Continuation-in-part of Ser. No. US 1991-756386, filed on 9 Sep 1991, GRANTED, Pat. No. US 337472 Continuation-in-part of Ser. No. US 1995-381212, filed on 31 Jan 1995, GRANTED, Pat. No. US 5608651 Continuation-in-part of Ser. No. US 1997-823516, filed on 24 Mar 1997, GRANTED, Pat. No. US 5994069 Continuation-in-part of Ser. No. US 1996-759038, filed on 2 Dec 1996, GRANTED, Pat. No. US 6090543 Continuation-in-part of Ser. No. US 1996-682853, filed on 12 Jul 1996, GRANTED, Pat. No. US 6001567 Continuation-in-part of Ser. No. US 1996-599491, filed on 24 Jan 1996, GRANTED, Pat. No. US 5846717 Continuation-in-part of Ser. No. US 2000-381212, filed on 8 Feb 2000, PENDING Continuation-in-part of Ser. No. US 2001-758282, filed on 11 Jan 2001, GRANTED, Pat. No. US 6635463
 PRAI WO 1997-US1072 19970121
 DT Utility
 FS APPLICATION
 LREP MEDLEN & CARROLL, LLP, 101 HOWARD STREET, SUITE 350, SAN FRANCISCO, CA, 94105
 CLMN Number of Claims: 8
 ECL Exemplary Claim: 1
 DRWN 145 Drawing Page(s)

LN.CNT 10762

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides novel cleavage agents and polymerases for the cleavage and modification of nucleic acid. The cleavage agents and polymerases find use, for example, for the detection and characterization of nucleic acid sequences and variations in nucleic acid sequences. In some embodiments, the 5' nuclease activity of a variety of enzymes is used to cleave a target-dependent cleavage structure, thereby indicating the presence of specific nucleic acid sequences or specific variations thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 6 OF 26 USPATFULL on STN

AN 2004:4400 USPATFULL

TI Methods and compositions for characterizing nucleic acids

IN Dahlberg, James E., Madison, WI, United States

Brow, Mary Ann D., Madison, WI, United States

Lyamichev, Victor I., Madison, WI, United States

PA Third Wave Technologies, Inc., Madison, WI, United States (U.S. corporation)

PI US 6673616 B1 20040106

AI US 2000-655378 20000905 (9)

RLI Continuation of Ser. No. US 1995-520946, filed on 30 Aug 1995, now patented, Pat. No. US 6372424 Continuation-in-part of Ser. No. US 1995-484956, filed on 7 Jun 1995, now patented, Pat. No. US 5843654, issued on 1 Dec 1998 Continuation-in-part of Ser. No. US 1995-402601, filed on 9 Mar 1995, now abandoned Continuation of Ser. No. US 1997-802233, filed on 19 Feb 1997, now patented, Pat. No. US 5888780, issued on 30 Mar 1997 Continuation-in-part of Ser. No. US 1994-337164, filed on 9 Nov 1994 Continuation of Ser. No. US 1997-789079, filed on 6 Feb 1997, now patented, Pat. No. US 5719028, issued on 17 Feb 1998 Continuation-in-part of Ser. No. US 1994-254359, filed on 6 Jun 1994, now patented, Pat. No. US 5614402, issued on 25 Mar 1997 Continuation-in-part of Ser. No. US 1993-73384, filed on 4 Jun 1993, now patented, Pat. No. US 5541311, issued on 30 Jun 1996 Continuation-in-part of Ser. No. US 1992-986330, filed on 7 Dec 1992, now abandoned

DT Utility

FS GRANTED

EXNAM Primary Examiner: Yucel, Remy; Assistant Examiner: Sandals, William

LREP Medlen & Carroll, LLP

CLMN Number of Claims: 20

ECL Exemplary Claim: 1

DRWN 151 Drawing Figure(s); 124 Drawing Page(s)

LN.CNT 13610

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to means for cleaving a nucleic acid **cleavage** structure in a site-specific manner. Enzymes, including 5' nucleases and 3' exonucleases, are used to detect and identify nucleic acids derived from microorganisms. Methods are provided which allow for the detection and identification of bacterial and viral pathogens in a sample.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 7 OF 26 USPATFULL on STN

AN 2003:265223 USPATFULL

TI RNA detection assays

IN Allawi, Hatim, Madison, WI, UNITED STATES

Argue, Brad T., Sun Prairie, WI, UNITED STATES

Bartholomay, Christian Tor, Madison, WI, UNITED STATES

Chehak, LuAnne, Janesville, WI, UNITED STATES
Curtis, Michelle L., Cottage Grove, WI, UNITED STATES
Eis, Peggy S., Madison, WI, UNITED STATES
Hall, Jeff G., Madison, WI, UNITED STATES
Ip, Hon S., Madison, WI, UNITED STATES
Ji, Lin, Madison, WI, UNITED STATES
Kaiser, Michael, Madison, WI, UNITED STATES
Kwiatkowski, Robert W., JR., Verona, WI, UNITED STATES
Lukowiak, Andrew A., Stoughton, WI, UNITED STATES
Lyamichev, Victor, Madison, WI, UNITED STATES
Lymaicheva, Natalie E., Madison, WI, UNITED STATES
Ma, WuPo, Madison, WI, UNITED STATES
Neri, Bruce P., Madison, WI, UNITED STATES
Olson, Sarah M., Cross Plains, WI, UNITED STATES
Olson-Munoz, Marilyn C., Madison, WI, UNITED STATES
Schaefer, James J., Madison, WI, UNITED STATES
Skrzypczynski, Zbigniew, Verona, WI, UNITED STATES
Takova, Tsetska Y., Madison, WI, UNITED STATES
Thompson, Lisa C., Madison, WI, UNITED STATES
Vedvik, Kevin L., Madison, WI, UNITED STATES

PI US 2003186238 A1 20031002

AI US 2002-84839 A1 20020226 (10)

RLI Continuation-in-part of Ser. No. US 2001-864636, filed on 24 May 2001,
PENDING Continuation-in-part of Ser. No. US 2000-577304, filed on 24 May
2000, PENDING Continuation-in-part of Ser. No. US 1999-350309, filed on
9 Jul 1999, GRANTED, Pat. No. US 6348314 Continuation-in-part of Ser.
No. US 1991-756386, filed on 9 Sep 1991, GRANTED, Pat. No. US 337472
Continuation-in-part of Ser. No. US 1995-381212, filed on 31 Jan 1995,
GRANTED, Pat. No. US 5608651 Continuation-in-part of Ser. No. US
1997-823516, filed on 24 Mar 1997, GRANTED, Pat. No. US 5994069
Continuation-in-part of Ser. No. US 1996-759038, filed on 2 Dec 1996,
GRANTED, Pat. No. US 6090543 Continuation-in-part of Ser. No. US
1996-682853, filed on 12 Jul 1996, GRANTED, Pat. No. US 6001567
Continuation-in-part of Ser. No. US 1996-599491, filed on 24 Jan 1996,
GRANTED, Pat. No. US 5846717 Continuation-in-part of Ser. No. US
2001-758282, filed on 11 Jan 2001, PENDING

PRAI WO 1997-US1072 19970121

DT Utility

FS APPLICATION

LREP Mary Ann D. Brow, MEDLEN & CARROLL, LLP, Suite 350, 101 Howard Street,
San Francisco, CA, 94105

CLMN Number of Claims: 57

ECL Exemplary Claim: 1

DRWN 194 Drawing Page(s)

LN.CNT 12043

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides novel cleavage agents and polymerases for
the cleavage and modification of nucleic acid. The cleavage agents and
polymerases find use, for example, for the detection and
characterization of nucleic acid sequences and variations in nucleic
acid sequences. In some embodiments, the 5' nuclease activity of a
variety of enzymes is used to cleave a target-dependent cleavage
structure, thereby indicating the presence of specific nucleic acid
sequences or specific variations thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 8 OF 26 USPATFULL on STN

AN 2003:219681 USPATFULL

TI Methods and compositions for detecting target sequences

IN Lyamichev, Victor, Madison, WI, UNITED STATES

Neri, Bruce P., Madison, WI, UNITED STATES

Hall, Jeff, Madison, WI, UNITED STATES
Lukowiak, Andrew A., Stoughton, WI, UNITED STATES
PI US 2003152971 A1 20030814
AI US 2002-290386 A1 20021107 (10)
RLI Continuation-in-part of Ser. No. US 2000-713601, filed on 15 Nov 2000,
PENDING Continuation-in-part of Ser. No. US 1999-350309, filed on 9 Jul
1999, GRANTED, Pat. No. US 6348314 Division of Ser. No. US 1996-756386,
filed on 26 Nov 1996, GRANTED, Pat. No. US 5985557
PRAI WO 1998-US5809 19980324
WO 1997-US1072 19970122
US 2001-344946P 20011107 (60)
US 2002-361060P 20020227 (60)
DT Utility
FS APPLICATION
LREP MEDLEN & CARROLL, LLP, Suite 350, 101 Howard Street, San Francisco, CA,
94105
CLMN Number of Claims: 53
ECL Exemplary Claim: 1
DRWN 170 Drawing Page(s)
LN.CNT 16700

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to compositions and methods for the
detection and characterization of nucleic acid sequences and variations
in nucleic acid sequences. The present invention relates to methods for
forming a nucleic acid cleavage structure on a target sequence and
cleaving the nucleic acid cleavage structure in a site-specific manner.
For example, in some embodiments, a 5' nuclease activity from any of a
variety of enzymes is used to cleave the target-dependent cleavage
structure, thereby indicating the presence of specific nucleic acid
sequences or specific variations thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 9 OF 26 USPATFULL on STN

AN 2003:194538 USPATFULL
TI Enzymes for the detection of nucleic acid sequences
IN Ma, Wu-Po, Madison, WI, UNITED STATES
Lyamichev, Victor I., Madison, WI, UNITED STATES
Kaiser, Michael W., Madison, WI, UNITED STATES
Lyamicheva, Natalie E., Madison, WI, UNITED STATES
Allawi, Hatim Taysir, Madison, WI, UNITED STATES
Schaefer, James J., Madison, WI, UNITED STATES
Neri, Bruce P., Madison, WI, UNITED STATES
PA Third Wave Technologies, Inc. (U.S. corporation)
PI US 2003134349 A1 20030717
US 6635463 B2 20031021
AI US 2001-758282 A1 20010111 (9)
RLI Continuation-in-part of Ser. No. US 2000-577304, filed on 24 May 2000,
PENDING
DT Utility
FS APPLICATION
LREP MEDLEN & CARROLL, LLP, 101 HOWARD STREET, SUITE 350, SAN FRANCISCO, CA,
94105
CLMN Number of Claims: 6
ECL Exemplary Claim: 1
DRWN 39 Drawing Page(s)
LN.CNT 3956

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel enzymes designed for direct
detection, characterization and quantitation of nucleic acids,
particularly RNA. The present invention provides enzymes that recognize
specific nucleic acid **cleavage** structures formed on a target

RNA sequence and that cleave the nucleic acid **cleavage** structure in a site-specific manner to produce non-target **cleavage** products. The present invention provides enzymes having an improved ability to specifically cleave a DNA member of a complex comprising DNA and RNA nucleic acid strands.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 10 OF 26 USPATFULL on STN
AN 2003:159260 USPATFULL
TI Systems for the detection of target sequences
IN Dahlberg, James E., Madison, WI, UNITED STATES
Brow, Mary Ann D., Madison, WI, UNITED STATES
Lyamichev, Victor I., Madison, WI, UNITED STATES
PI US 2003108873 A1 20030612
AI US 2001-941193 A1 20010828 (9)
RLI Division of Ser. No. US 2000-655378, filed on 5 Sep 2000, PENDING
Continuation of Ser. No. US 1995-520946, filed on 30 Aug 1995, GRANTED,
Pat. No. US 6372424 Continuation-in-part of Ser. No. US 1995-484956,
filed on 7 Jun 1995, GRANTED, Pat. No. US 5843654 Continuation-in-part
of Ser. No. US 1995-402601, filed on 9 Mar 1995, ABANDONED
Continuation-in-part of Ser. No. US 1997-802233, filed on 19 Feb 1997,
GRANTED, Pat. No. US 5888780 Continuation-in-part of Ser. No. US
1994-337164, filed on 9 Nov 1994, ABANDONED Continuation-in-part of Ser.
No. US 1997-789079, filed on 6 Feb 1997, GRANTED, Pat. No. US 5719028
Continuation-in-part of Ser. No. US 1994-254359, filed on 6 Jun 1994,
GRANTED, Pat. No. US 5614402 Continuation-in-part of Ser. No. US
1993-73384, filed on 4 Jun 1993, GRANTED, Pat. No. US 5541311
Continuation-in-part of Ser. No. US 1992-986330, filed on 7 Dec 1992,
GRANTED, Pat. No. US 5422253
DT Utility
FS APPLICATION
LREP MEDLEN & CARROLL, LLP, 101 HOWARD STREET, SUITE 350, SAN FRANCISCO, CA,
94105
CLMN Number of Claims: 14
ECL Exemplary Claim: 95
DRWN 124 Drawing Page(s)
LN.CNT 4386

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to means for cleaving a nucleic acid **cleavage** structure in a site-specific manner. Enzymes, including 5' nucleases and 3' exonucleases, are used to detect and identify nucleic acids derived from microorganisms. Methods are provided which allow for the detection and identification of bacterial and viral pathogens in a sample.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 11 OF 26 USPATFULL on STN
AN 2003:152712 USPATFULL
TI Detection of RNA
IN Allawi, Hatim, Madison, WI, UNITED STATES
Bartholomay, Christian Tor, Madison, WI, UNITED STATES
Chehak, LuAnne, Janesville, WI, UNITED STATES
Curtis, Michelle L., Cottage Grove, WI, UNITED STATES
Eis, Peggy S., Madison, WI, UNITED STATES
Hall, Jeff G., Madison, WI, UNITED STATES
Ip, Hon S., Madison, WI, UNITED STATES
Kaiser, Michael, Madison, WI, UNITED STATES
Kwiatkowski, Robert W., JR., Verona, WI, UNITED STATES
Lukowiak, Andrew A., Madison, WI, UNITED STATES
Lyamichev, Victor, Madison, WI, UNITED STATES

Ma, WuPo, Madison, WI, UNITED STATES
Olson-Munoz, Marilyn C., Madison, WI, UNITED STATES
Olson, Sarah M., Cross Plains, WI, UNITED STATES
Schaefer, James J., Madison, WI, UNITED STATES
Skrzypczynski, Zbigniew, Verona, WI, UNITED STATES
Takova, Tsetska Y., Madison, WI, UNITED STATES
Vedvik, Kevin L., Madison, WI, UNITED STATES
Lyamichev, Natalie, Madison, WI, UNITED STATES
Neri, Burce P., Madison, WI, UNITED STATES

PA Third Wave Technologies, Inc., Madison, WI, 53719 (2)

PI US 2003104378 A1 20030605

AI US 2001-864636 A1 20010524 (9)

RLI Continuation-in-part of Ser. No. US 2000-577304, filed on 24 May 2000,
PENDING Continuation-in-part of Ser. No. US 1999-350309, filed on 9 Jul
1999, GRANTED, Pat. No. US 6348314 Continuation-in-part of Ser. No. US
1991-756386, filed on 9 Sep 1991, GRANTED, Pat. No. US 337472
Continuation-in-part of Ser. No. US 1995-381212, filed on 31 Jan 1995,
GRANTED, Pat. No. US 5608651 Continuation-in-part of Ser. No. US
1997-823516, filed on 24 Mar 1997, GRANTED, Pat. No. US 5994069
Continuation-in-part of Ser. No. US 1996-759038, filed on 2 Dec 1996,
GRANTED, Pat. No. US 6090543 Continuation-in-part of Ser. No. US
1996-682853, filed on 12 Jul 1996, GRANTED, Pat. No. US 6001567
Continuation-in-part of Ser. No. US 1996-599491, filed on 24 Jan 1996,
GRANTED, Pat. No. US 5846717 Continuation-in-part of Ser. No. US
2000-381212, filed on 8 Feb 2000, PENDING Continuation-in-part of Ser.
No. US 2001-758282, filed on 11 Jan 2001, PENDING

PRAI WO 1997-US1072 19970121

DT Utility

FS APPLICATION

LREP MEDLEN & CARROLL, LLP, 101 HOWARD STREET, SUITE 350, SAN FRANCISCO, CA,
94105

CLMN Number of Claims: 49

ECL Exemplary Claim: 1

DRWN 145 Drawing Page(s)

LN.CNT 10869

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides novel cleavage agents and polymerases for
the cleavage and modification of nucleic acid. The cleavage agents and
polymerases find use, for example, for the detection and
characterization of nucleic acid sequences and variations in nucleic
acid sequences. In some embodiments, the 5' nuclease activity of a
variety of enzymes is used to cleave a target-dependent cleavage
structure, thereby indicating the presence of specific nucleic acid
sequences or specific variations thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 12 OF 26 USPATFULL on STN

AN 2003:140404 USPATFULL

TI Invasive cleavage of nucleic acids

IN Prudent, James R., Madison, WI, UNITED STATES

Hall, Jeff G., Madison, WI, UNITED STATES

Lyamichev, Victor I., Madison, WI, UNITED STATES

Brow, Mary Ann D., Madison, WI, UNITED STATES

Dahlberg, James E., Madison, WI, UNITED STATES

PI US 2003096245 A1 20030522

AI US 2001-982667 A1 20011018 (9)

RLI Continuation of Ser. No. US 1999-350309, filed on 9 Jul 1999, GRANTED,
Pat. No. US 6348314 Division of Ser. No. US 1996-756386, filed on 26 Nov
1996, GRANTED, Pat. No. US 5985557 Continuation-in-part of Ser. No. US
1996-682853, filed on 12 Jul 1996, GRANTED, Pat. No. US 6001567
Continuation-in-part of Ser. No. US 1996-599491, filed on 24 Jan 1996,

GRANTED, Pat. No. US 5846717
DT Utility
FS APPLICATION
LREP MEDLEN & CARROLL, LLP, 101 HOWARD STREET, SUITE 350, SAN FRANCISCO, CA,
94105
CLMN Number of Claims: 35
ECL Exemplary Claim: 26
DRWN 90 Drawing Page(s)
LN.CNT 7533

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to means for the detection and characterization of nucleic acid sequences, as well as variations in nucleic acid sequences. The present invention also relates to methods for forming a nucleic acid cleavage structure on a target sequence and cleaving the nucleic acid cleavage structure in a site-specific manner. The structure-specific nuclease activity of a variety of enzymes is used to cleave the target-dependent cleavage structure, thereby indicating the presence of specific nucleic acid sequences or specific variations thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 13 OF 26 USPATFULL on STN
AN 2003:129820 USPATFULL
TI FEN-1 endonucleases, mixtures and cleavage methods
IN Kaiser, Michael W., Madison, WI, United States
Lyamichev, Victor I., Madison, WI, United States
Lyamicheva, Natasha, Madison, WI, United States
PA Third Wave Technologies, Ins., Madison, WI, United States (U.S.
corporation)
PI US 6562611 B1 20030513
WO 9823774 19980604
AI US 1999-308825 19991008 (9)
WO 1997-US21783 19971126
19991008 PCT 371 date
RLI Continuation of Ser. No. US 1996-757653, filed on 29 Nov 1996, now
patented, Pat. No. US 5843669 Continuation of Ser. No. US 1996-758314,
filed on 2 Dec 1996, now patented, Pat. No. US 6090606
DT Utility
FS GRANTED
EXNAM Primary Examiner: Patterson, Jr., Charles L.
LREP Medlen & Carroll, LLP
CLMN Number of Claims: 47
ECL Exemplary Claim: 1
DRWN 198 Drawing Figure(s); 185 Drawing Page(s)
LN.CNT 13398

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to means for the detection and characterization of nucleic acid sequences, as well as variations in nucleic acid sequences. The present invention also relates to improved cleavage means for the detection and characterization of nucleic acid sequences. Structure-specific nucleases derived from a variety of thermostable organisms are provided. These structure-specific nucleases are used to cleave target-dependent cleavage structures, thereby indicating the presence of specific nucleic acid sequences or specific variations thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 14 OF 26 USPATFULL on STN
AN 2003:115740 USPATFULL
TI FEN-1 endonuclease, mixtures and cleavage methods

IN Kaiser, Michael W., Madison, WI, United States
Lyamichev, Victor I., Madison, WI, United States
Lyamicheva, Natasha, Madison, WI, United States
PA Third Wave Technologies, Inc., Madison, WI, United States (U.S.
corporation)
PI US 6555357 B1 20030429
AI US 2000-684938 20001006 (9)
RLI Division of Ser. No. US 308825 Continuation of Ser. No. US 1996-757653,
filed on 29 Nov 1996, now patented, Pat. No. US 5843669 Continuation of
Ser. No. US 1996-758314, filed on 2 Dec 1996, now patented, Pat. No. US
6090606
DT Utility
FS GRANTED
EXNAM Primary Examiner: Patterson, Jr., Charles L.
LREP Medlen & Carroll, LLP
CLMN Number of Claims: 8
ECL Exemplary Claim: 1
DRWN 219 Drawing Figure(s); 185 Drawing Page(s)
LN.CNT 13235

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to means for the detection and
characterization of nucleic acid sequences, as well as variations in
nucleic acid sequences. The present invention also relates to improved
cleavage means for the detection and characterization of nucleic acid
sequences. Structure-specific nucleases derived from a variety of
thermostable organisms are provided. These structure-specific nucleases
are used to cleave target-dependent cleavage structures, thereby
indicating the presence of specific nucleic acid sequences or specific
variations thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 15 OF 26 USPATFULL on STN
AN 2003:64675 USPATFULL
TI Reactions on dendrimers
IN Neri, Bruce P., Madison, WI, UNITED STATES
Hall, Jeff G., Madison, WI, UNITED STATES
Lyamichev, Victor, Madison, WI, UNITED STATES
Smith, Lloyd M., Madison, WI, UNITED STATES
PI US 2003044796 A1 20030306
US 6692917 B2 20040217
AI US 2001-940244 A1 20010827 (9)
RLI Continuation-in-part of Ser. No. US 2000-732622, filed on 8 Dec 2000,
PENDING Continuation-in-part of Ser. No. US 1999-350309, filed on 9 Jul
1999, GRANTED, Pat. No. US 6348314 Division of Ser. No. US 1996-756386,
filed on 26 Nov 1996, GRANTED, Pat. No. US 5985557 Division of Ser. No.
US 2000-381212, filed on 8 Feb 2000, PENDING A 371 of International Ser.
No. WO 1998-US5809, filed on 24 Mar 1998, UNKNOWN
DT Utility
FS APPLICATION
LREP David A. Casimir, MEDLEN & CARROLL, LLP, Suite 350, 101 Howard Street,
San Francisco, CA, 94104
CLMN Number of Claims: 38
ECL Exemplary Claim: 1
DRWN 210 Drawing Page(s)
LN.CNT 15736

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to compositions and methods for the
detection and characterization of nucleic acid sequences and variations
in nucleic acid sequences. The present invention relates to methods for
forming a nucleic acid cleavage structure on dendrimers and cleaving the
nucleic acid cleavage structure in a site-specific manner. For example,

in some embodiments, a 5' nuclease activity from any of a variety of enzymes is used to cleave the target-dependent cleavage structure, thereby indicating the presence of specific nucleic acid sequences or specific variations thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 16 OF 26 USPATFULL on STN
AN 2003:17346 USPATFULL
TI Nucleic acid detection employing charged adducts
IN Brow, Mary Ann D., Madison, WI, UNITED STATES
Grotelueschen Hall, Jeff Steven, Madison, WI, UNITED STATES
Lyamichev, Victor, Madison, WI, UNITED STATES
Olive, David Michael, Madison, WI, UNITED STATES
Prudent, James Robert, Madison, WI, UNITED STATES
PI US 2003013098 A1 20030116
AI US 2002-74328 A1 20020212 (10)
RLI Continuation of Ser. No. US 1999-333145, filed on 14 Jun 1999, PENDING
Continuation of Ser. No. US 1996-682853, filed on 12 Jul 1996, GRANTED,
Pat. No. US 6001567 Continuation-in-part of Ser. No. US 1996-599491,
filed on 24 Jan 1996, GRANTED, Pat. No. US 5846717
DT Utility
FS APPLICATION
LREP MEDLEN & CARROLL, LLP, Suite 350, 101 Howard Street, San Francisco, CA,
94105
CLMN Number of Claims: 52
ECL Exemplary Claim: 1
DRWN 82 Drawing Page(s)
LN.CNT 7454

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to means for the detection and
characterization of nucleic acid sequences, as well as variations in
nucleic acid sequences. The present invention also relates to methods
for forming a nucleic acid cleavage structure on a target sequence and
cleaving the nucleic acid cleavage structure in a site-specific manner.
The 5' nuclease activity of a variety of enzymes is used to cleave the
target-dependent cleavage structure, thereby indicating the presence of
specific nucleic acid sequences or specific variations thereof. The
present invention further relates to methods and devices for the
separation of nucleic acid molecules based by charge.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 17 OF 26 USPATFULL on STN
AN 2002:343897 USPATFULL
TI Nucleic acid detection assays
IN Prudent, James R., UNITED STATES
Hall, Jeff G., Madison, WI, UNITED STATES
Lyamichev, Victor I., Madison, WI, UNITED STATES
D. Brow, Mary Ann, Madison, WI, UNITED STATES
Dahlberg, James E., Madison, WI, UNITED STATES
PI US 2002197623 A1 20021226
AI US 2002-81806 A1 20020222 (10)
RLI Continuation of Ser. No. US 2001-982667, filed on 18 Oct 2001, PENDING
Continuation of Ser. No. US 1999-350309, filed on 9 Jul 1999, GRANTED,
Pat. No. US 6348314 Division of Ser. No. US 1996-756386, filed on 26 Nov
1996, GRANTED, Pat. No. US 5985557 Continuation-in-part of Ser. No. US
1996-682853, filed on 12 Jul 1996, GRANTED, Pat. No. US 6001567
Continuation-in-part of Ser. No. US 1996-599491, filed on 24 Jan 1996,
GRANTED, Pat. No. US 5846717
DT Utility
FS APPLICATION

LREP MEDLEN & CARROLL, LLP, Suite 350, 101 Howard Street, San Francisco, CA,
94105
CLMN Number of Claims: 25
ECL Exemplary Claim: 1
DRWN 90 Drawing Page(s)
LN.CNT 8311

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to means for the detection and
characterization of nucleic acid sequences, as well as variations in
nucleic acid sequences. The present invention also relates to methods
for forming a nucleic acid cleavage structure on a target sequence and
cleaving the nucleic acid cleavage structure in a site-specific manner.
The structure-specific nuclease activity of a variety of enzymes is used
to cleave the target-dependent cleavage structure, thereby indicating
the presence of specific nucleic acid sequences or specific variations
thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 18 OF 26 USPATFULL on STN

AN 2002:329806 USPATFULL

TI Invasion assays

IN Hall, Jeff G., Madison, WI, UNITED STATES

Lyamichev, Victor I., Madison, WI, UNITED STATES

Mast, Andrea L., Madison, WI, UNITED STATES

Brow, Mary Ann D., Madison, WI, UNITED STATES

PI US 2002187486 A1 20021212

AI US 2001-33297 A1 20011102 (10)

RLI Continuation of Ser. No. US 1999-350597, filed on 9 Jul 1999, PENDING
Continuation of Ser. No. US 1997-823516, filed on 24 Mar 1997, GRANTED,
Pat. No. US 5994069 Continuation-in-part of Ser. No. US 1996-756038,
filed on 26 Nov 1996, ABANDONED Continuation-in-part of Ser. No. US
1996-756386, filed on 26 Nov 1996, GRANTED, Pat. No. US 5985557
Continuation-in-part of Ser. No. US 1996-682853, filed on 12 Jul 1996,
GRANTED, Pat. No. US 6001567 Continuation-in-part of Ser. No. US
1996-599491, filed on 24 Jan 1996, GRANTED, Pat. No. US 5846717

DT Utility

FS APPLICATION

LREP MEDLEN & CARROLL, LLP, Suite 350, 101 Howard Street, San Francisco, CA,
94105

CLMN Number of Claims: 34

ECL Exemplary Claim: 1

DRWN 121 Drawing Page(s)

LN.CNT 10560

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to means for the detection and
characterization of nucleic acid sequences, as well as variations in
nucleic acid sequences. The present invention also relates to methods
for forming a nucleic acid cleavage structure on a target sequence and
cleaving the nucleic acid cleavage structure in a site-specific manner.
The structure-specific nuclease activity of a variety of enzymes is used
to cleave the target-dependent cleavage structure, thereby indicating
the presence of specific nucleic acid sequences or specific variations
thereof. The present invention further relates to methods and devices
for the separation of nucleic acid molecules based on charge. The
present invention also provides methods for the detection of non-target
cleavage products via the formation of a complete and activated protein
binding region. The invention further provides sensitive and specific
methods for the detection of human cytomegalovirus nucleic acid in a
sample.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 19 OF 26 USPATFULL on STN
AN 2002:254176 USPATFULL
TI Detection of nucleic acids by multiple sequential invasive cleavages 02
IN Hall, Jeff G., Madison, WI, United States
Lyamichev, Victor I., Madison, WI, United States
Mast, Andrea L., Madison, WI, United States
Brow, Mary Ann D., Madison, WI, United States
PA Third Wave Technologies, Inc, Madison, WI, United States (U.S.
corporation)
PI US 6458535 B1 20021001
AI US 1999-350597 19990709 (9)
RLI Continuation of Ser. No. US 1997-823516, filed on 24 Mar 1997, now
patented, Pat. No. US 5994069 Continuation-in-part of Ser. No. US
1996-759038, filed on 2 Dec 1996, now patented, Pat. No. US 6090543
Continuation-in-part of Ser. No. US 1996-756386, filed on 26 Nov 1996,
now patented, Pat. No. US 5085557 Continuation-in-part of Ser. No. US
1996-682853, filed on 12 Jul 1996, now patented, Pat. No. US 6001567
Continuation-in-part of Ser. No. US 1996-599491, filed on 24 Jan 1996,
now patented, Pat. No. US 5846717, issued on 8 Dec 1998
DT Utility
FS GRANTED
EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Souaya, Jehanne
LREP Medlen & Carroll, LLP
CLMN Number of Claims: 27
ECL Exemplary Claim: 1
DRWN 170 Drawing Figure(s); 128 Drawing Page(s)
LN.CNT 13831
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to means for the detection and
characterization of nucleic acid sequences, as well as variations in
nucleic acid sequences. The present invention also relates to methods
for forming a nucleic acid cleavage structure on a target sequence and
cleaving the nucleic acid cleavage structure in a site-specific manner.
The structure-specific nuclease activity of a variety of enzymes is used
to cleave the target-dependent cleavage structure, thereby indicating
the presence of specific nucleic acid sequences or specific variations
thereof. The present invention further relates to methods and devices
for the separation of nucleic acid molecules based on charge. The
present invention also provides methods for the detection of non-target
cleavage products via the formation of a complete and activated protein
binding region. The invention further provides sensitive and specific
methods for the detection of human cytomegalovirus nucleic acid in a
sample.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 20 OF 26 USPATFULL on STN
AN 2002:34297 USPATFULL
TI Invasive cleavage of nucleic acids
IN Prudent, James R., Madison, WI, United States
Hall, Jeff G., Madison, WI, United States
Lyamichev, Victor I., Madison, WI, United States
Brow, Mary Ann D., Madison, WI, United States
Dahlberg, James E., Madison, WI, United States
PA Third Wave Technologies, Inc., Madison, WI, United States (U.S.
corporation)
PI US 6348314 B1 20020219
AI US 1999-350309 19990709 (9)
RLI Division of Ser. No. US 1996-756386, filed on 29 Nov 1996, now patented,
Pat. No. US 5985557 Continuation-in-part of Ser. No. US 1996-682853,
filed on 12 Jul 1996, now patented, Pat. No. US 6001567

Continuation-in-part of Ser. No. US 1996-599491, filed on 24 Jan 1996,
now patented, Pat. No. US 5846717, issued on 8 Dec 1998

DT Utility
FS GRANTED
EXNAM Primary Examiner: Campbell, Eggerton A.
LREP Medlen & Carroll, LLP
CLMN Number of Claims: 72
ECL Exemplary Claim: 1
DRWN 118 Drawing Figure(s); 90 Drawing Page(s)
LN.CNT 8623

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to means for the detection and
characterization of nucleic acid sequences, as well as variations in
nucleic acid sequences. The present invention also relates to methods
for forming a nucleic acid cleavage structure on a target sequence and
cleaving the nucleic acid cleavage structure in a site-specific manner.
The structure-specific nuclease activity of a variety of enzymes is used
to cleave the target-dependent cleavage structure, thereby indicating
the presence of specific nucleic acid sequences or specific variations
thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 21 OF 26 USPATFULL on STN

AN 2000:91761 USPATFULL
TI Cleavage agents
IN Kaiser, Michael W., Madison, WI, United States
Lyamichev, Victor I., Madison, WI, United States
Lyamicheva, Natasha, Madison, WI, United States
PA Third Wave Technologies, Inc., Madison, WI, United States (U.S.
corporation)
PI US 6090606 20000718
AI US 1996-758314 19961202 (8)
RLI Continuation-in-part of Ser. No. US 1996-756386, filed on 26 Nov 1996
which is a continuation-in-part of Ser. No. US 1996-682853, filed on 12
Jul 1996 which is a continuation-in-part of Ser. No. US 1996-599491,
filed on 24 Jan 1996, now patented, Pat. No. US 5846717 which is a
continuation-in-part of Ser. No. US 1996-756376, filed on 2 Dec 1996

DT Utility
FS Granted
EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Shoemaker, Debra
LREP Medlen & Carroll, LLP
CLMN Number of Claims: 24
ECL Exemplary Claim: 6
DRWN 144 Drawing Figure(s); 117 Drawing Page(s)
LN.CNT 11295

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to means for the detection and
characterization of nucleic acid sequences, as well as variations in
nucleic acid sequences. The present invention also relates to improved
cleavage means for the detection and characterization of nucleic acid
sequences. Structure-specific nucleases derived from a variety of
thermostable organisms are provided. These structure-specific nucleases
are used to cleave target-dependent cleavage structures, thereby
indicating the presence of specific nucleic acid sequences or specific
variations thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 22 OF 26 USPATFULL on STN

AN 2000:91698 USPATFULL
TI Cleavage of nucleic acids

IN Prudent, James R., Madison, WI, United States
Hall, Jeff G., Madison, WI, United States
Lyamichev, Victor I., Madison, WI, United States
Brow, Mary Ann D., Madison, WI, United States
Dahlberg, James E., Madison, WI, United States
PA Third Wave Technologies, Inc., Madison, WI, United States (U.S.
corporation)
PI US 6090543 20000718
AI US 1996-759038 19961202 (8)
RLI Continuation-in-part of Ser. No. US 1996-756386, filed on 26 Nov 1996
which is a continuation-in-part of Ser. No. US 1996-682853, filed on 12
Jul 1996 which is a continuation-in-part of Ser. No. US 1996-599491,
filed on 24 Jan 1996 76 Ser. No. US 1996-758314, filed on 2 Dec 1996
DT Utility
FS Granted
EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Shoemaker, Debra
LREP Medlen & Carroll, LLP
CLMN Number of Claims: 27
ECL Exemplary Claim: 1
DRWN 102 Drawing Figure(s); 117 Drawing Page(s)
LN.CNT 11426
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to means for the detection and
characterization of nucleic acid sequences, as well as variations in
nucleic acid sequences. The present invention also relates to methods
for forming a nucleic acid cleavage structure on a target sequence and
cleaving the nucleic acid cleavage structure in a site-specific manner.
The structure-specific nuclease activity of a variety of enzymes is used
to cleave the target-dependent cleavage structure, thereby indicating
the presence of specific nucleic acid sequences or specific variations
thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 23 OF 26 USPATFULL on STN
AN 1999:163423 USPATFULL.
TI Detection of nucleic acid sequences by invader-directed cleavage
IN Brow, Mary Ann D., Madison, WI, United States
Hall, Jeff Steven Grotelueschen, Madison, WI, United States
Lyamichev, Victor, Madison, WI, United States
Olive, David Michael, Madison, WI, United States
Prudent, James Robert, Madison, WI, United States
PA Third Wave Technologies, Inc., CA, United States (U.S. corporation)
PI US 6001567 19991214
AI US 1996-682853 19960712 (8)
RLI Continuation-in-part of Ser. No. US 1996-599491, filed on 24 Jan 1996,
now patented, Pat. No. US 5846717
DT Utility
FS Granted
EXNAM Primary Examiner: Arthur, Lisa B.; Assistant Examiner: Souaya, Jehanne
LREP Medlen & Carroll, LLP
CLMN Number of Claims: 15
ECL Exemplary Claim: 1
DRWN 66 Drawing Figure(s); 82 Drawing Page(s)
LN.CNT 7836
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to means for the detection and
characterization of nucleic acid sequences, as well as variations in
nucleic acid sequences. The present invention also relates to methods
for forming a nucleic acid cleavage structure on a target sequence and
cleaving the nucleic acid cleavage structure in a site-specific manner.
The 5' nuclease activity of a variety of enzymes is used to cleave the

target-dependent cleavage structure, thereby indicating the presence of specific nucleic acid sequences or specific variations thereof. The present invention further relates to methods and devices for the separation of nucleic acid molecules based by charge.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 24 OF 26 USPATFULL on STN

AN 1999:155453 USPATFULL

TI Detection of nucleic acids by multiple sequential invasive cleavages

IN Hall, Jeff G., Madison, WI, United States

Lyamichev, Victor I., Madison, WI, United States

Mast, Andrea L., Madison, WI, United States

Brow, Mary Ann D., Madison, WI, United States

PA Third Wave Technologies, Inc., Madison, WI, United States (U.S. corporation)

PI US 5994069 19991130

AI US 1997-823516 19970324 (8)

RLI Continuation-in-part of Ser. No. WO 1997-US1072, filed on 21 Jan 1997 which is a continuation-in-part of Ser. No. US 1996-759038, filed on 2 Dec 1996 And a continuation-in-part of Ser. No. US 1996-758314, filed on 2 Dec 1996 which is a continuation-in-part of Ser. No. US 1996-756386, filed on 26 Nov 1996 which is a continuation-in-part of Ser. No. US 1996-682853, filed on 12 Jul 1996 which is a continuation-in-part of Ser. No. US 1996-599491, filed on 24 Jan 1996, said Ser. No. US 759038 which is a continuation-in-part of Ser. No. US 1996-756386, filed on 26 Nov 1996

DT Utility

FS Granted

EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Shoemaker, Debra

LREP Medlen & Carroll, LLP

CLMN Number of Claims: 34

ECL Exemplary Claim: 1

DRWN 169 Drawing Figure(s); 128 Drawing Page(s)

LN.CNT 14892

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to means for the detection and characterization of nucleic acid sequences, as well as variations in nucleic acid sequences. The present invention also relates to methods for forming a nucleic acid cleavage structure on a target sequence and cleaving the nucleic acid cleavage structure in a site-specific manner. The structure-specific nuclease activity of a variety of enzymes is used to cleave the target-dependent cleavage structure, thereby indicating the presence of specific nucleic acid sequences or specific variations thereof. The present invention further relates to methods and devices for the separation of nucleic acid molecules based on charge. The present invention also provides methods for the detection of non-target cleavage products via the formation of a complete and activated protein binding region. The invention further provides sensitive and specific methods for the detection of human cytomegalovirus nucleic acid in a sample.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 25 OF 26 USPATFULL on STN

AN 1999:146257 USPATFULL

TI Invasive cleavage of nucleic acids

IN Prudent, James R., Madison, WI, United States

Hall, Jeff G., Madison, WI, United States

Lyamichev, Victor I., Madison, WI, United States

Brow, Mary Ann D., Madison, WI, United States

Dahlberg, James E., Madison, WI, United States

PA Third Wave Technologies, Inc., WI, United States (U.S. corporation)
PI US 5985557 19991116
AI US 1996-756386 19961126 (8)
RLI Continuation-in-part of Ser. No. US 1996-682853, filed on 12 Jul 1996
which is a continuation-in-part of Ser. No. US 1996-599491, filed on 24
Jan 1996, now patented, Pat. No. US 5846717
DT Utility
FS Granted
EXNAM Primary Examiner: Campbell, Eggerton A.
LREP Medlen & Carroll, LLP
CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN 87 Drawing Figure(s); 90 Drawing Page(s)
LN.CNT 8630

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to means for the detection and
characterization of nucleic acid sequences, as well as variations in
nucleic acid sequences. The present invention also relates to methods
for forming a nucleic acid cleavage structure on a target sequence and
cleaving the nucleic acid cleavage structure in a site-specific manner.
The structure-specific nuclease activity of a variety of enzymes is used
to cleave the target-dependent cleavage structure, thereby indicating
the presence of specific nucleic acid sequences or specific variations
thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 26 OF 26 USPATFULL on STN

AN 1998:154035 USPATFULL

TI Detection of nucleic acid sequences by invader-directed **cleavage**

IN Brow, Mary Ann D., Madison, WI, United States

Hall, Jeff Steven Grotelueschen, Madison, WI, United States

Lyamichev, Victor, Madison, WI, United States

Olive, David Michael, Madison, WI, United States

Prudent, James Robert, Madison, WI, United States

PA Third Wave Technologies, Inc., Madison, WI, United States (U.S.
corporation)

PI US 5846717 19981208

AI US 1996-599491 19960124 (8)

DT Utility

FS Granted

EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Shoemaker, Debra

LREP Medlen & Carroll, LLP

CLMN Number of Claims: 32

ECL Exemplary Claim: 1

DRWN 79 Drawing Figure(s); 54 Drawing Page(s)

LN.CNT 5515

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to means for the detection and
characterization of nucleic acid sequences, as well as variations in
nucleic acid sequences. The present invention also relates to methods
for forming a nucleic acid **cleavage** structure on a target
sequence and cleaving the nucleic acid **cleavage** structure in a
site-specific manner. The 5' nuclease activity of a variety of enzymes
is used to cleave the target-dependent **cleavage** structure,
thereby indicating the presence of specific nucleic acid sequences or
specific variations thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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(FILE 'HOME' ENTERED AT 14:38:17 ON 16 DEC 2004)

FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 14:39:49 ON
16 DEC 2004

L1	104 S THERMOSTABLE (3A) 5(2A) NUCLEASE?
L2	95 S L1 AND CLEAVAGE
L3	0 S L2 AND LACK?(10A) SYNTHESIS (4A) ACTIVIT?
L4	40 S L2 AND SYNTHESIS (10A) ACTIVIT?
L5	40 DUP REM L4 (0 DUPLICATES REMOVED)
L6	40 S L5 AND PROBE?
L7	39 S L6 AND LACK? (10A) ACTIVIT?
L8	39 S L7 AND REGION?
L9	39 S L8 AND PORTION?
L10	39 S L9 AND FIRST (3A) (PROBE? OR NUCLEIC ACID? OR OLIGONUCLEOTID
L11	28 S L10 AND FIRST (3A) REGION?
L12	26 S L11 AND SECOND (3A) (PROBE? OR NUCLEIC ACID? OR OLIGONUCLEOTI

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